WHAT IS CLAIMED IS:

1. A method for multi-objective portfolio optimization for use in investment decisions based on competing objectives and a plurality of constraints constituting a portfolio problem, the method comprising:

generating an initial population of solutions of portfolio allocations;

performing a first multi-objective process, based on the initial population and the competing objectives, to generate a first interim efficient frontier;

performing a second multi-objective process, based on the initial population and the competing objectives, to generate a second interim efficient frontier; and

fusing the first interim efficient frontier with the second interim efficient frontier to create an augmented efficient frontier for use in investment decisioning.

2. The method of claim 1, wherein the first multi-objective process and the second multi-objective process are the same process.

3. The method of claim 1, wherein the first multi-objective process and the second multi-objective process are a different process.

4. The method of claim 1, wherein the portfolio allocations are allocations of securities.

5. The method of claim 1, wherein the fusing of the first interim efficient frontier and the second interim efficient frontier is performed using a concatenation process.

6. The method of claim 1, wherein the competing objectives are risk and return measures.

7. The method of claim 1, wherein the first multi-objective process is a Pareto Sorting Evolutionary Algorithm (PSEA) process.

8. The method of claim 7, further including using a dominance filtering process in the generating of the first interim efficient frontiers.

9. The method of claim 1, wherein the first multi-objective process is a Target Objectives Genetic Algorithm (TOGA) process.

10. The method of claim 9, further including using a dominance filtering process in the generating of the first interim efficient frontiers.

11. The method of claim 1, wherein the first multi-objective process is a sequential linear programming process.

12. The method of claim 1, wherein generating the initial population includes generating an initial population of feasible solutions.

13. The method of claim 1, the method further including selecting at least one portfolio from the generated efficient frontier in a multi-objective decision making environment to meet investment goals.

14. The method of claim 13, the selecting at least one portfolio from the generated efficient frontier includes:

observing the generated efficient frontier;

identifying an area of the efficient frontier in which there is a gap;

effecting a gap filling process by which the efficient frontier is filled in the area of the gap.

15. The method of claim 14, wherein the gap filling process is performed using a Target Objectives Genetic Algorithm process.

16. The method of claim 14, wherein the efficient frontier is presented to a human observer in the form of a graphical representation.

17. The method of claim 14, wherein the selecting at least one portfolio from the generated efficient frontier includes selecting the at least one portfolio in the from the area that was filled in by the gap filling process.

18. The method of claim 14, wherein the effecting a gap filling process by which the efficient frontier is filled in the area of the gap further including:

providing a set of target vectors;

generating a series of chromosomes over multiple generations; and

evaluating the fitness of each chromosome until a population with an acceptable fitness is determined so as to fill in the identified gap.

19. The method of claim 1, wherein the generating an initial population of solutions of portfolio allocations includes a process for systematically generating the initial population of solutions to substantially cover an entire risk/return objectives space.

20. The method of claim 19, wherein the generating the initial population of solutions uses a combination of linear programming and sequential linear programming algorithms.

21. The method of claim 1, further comprising applying a dominance process to the augmented efficient frontier to create a global efficient frontier.

22. A system for multi-objective portfolio optimization for use in investment decisions based on competing objectives and a plurality of constraints constituting a portfolio problem, the system comprising:

a population generation portion that generates an initial population of solutions of portfolio allocations;

a first processing portion that performs a first multi-objective process, based on the initial population and the competing objectives, to generate a first interim efficient frontier;

a second processing portion that performs a second multi-objective process, based on the initial population and the competing objectives, to generate a second interim efficient frontier; and

a fusion portion that fuses the first interim efficient frontier with the second interim efficient frontier to create an augmented efficient frontier for use in investment decisioning.

23. The system of claim 22, wherein the first multi-objective process and the second multi-objective process are a different process.

24. The system of claim 22, wherein the fusing of the first interim efficient frontier and the second interim efficient frontier is performed using a concatenation process.

25. The system of claim 22, further including a dominance filtering portion, the dominance filtering portion performing a dominance filtering process in conjunction with the generating of the first interim efficient frontiers.

26. A computer readable medium for multi-objective portfolio optimization for use in investment decisions based on competing objectives and a plurality of constraints constituting a portfolio problem, the computer readable medium comprising:

a first portion that generates an initial population of solutions of portfolio allocations;

a second portion that performs a first multi-objective process, based on the initial population and the competing objectives, to generate a first interim efficient frontier;

a third portion that performs a second multi-objective process, based on the initial population and the competing objectives, to generate a second interim efficient frontier; and

a fourth portion that fuses the first interim efficient frontier with the second interim efficient frontier to create an augmented efficient frontier for use in investment decisioning.

27. A method for multi-objective portfolio optimization for use in investment decisions based on competing objectives and a plurality of constraints constituting a portfolio problem, the method comprising:

generating an initial population of solutions of portfolio allocations;

performing a first multi-objective process, based on the initial population and the competing objectives, to generate a first interim efficient frontier;

performing a second multi-objective process, based on the initial population and the competing objectives, to generate a second interim efficient frontier; and

fusing the first interim efficient frontier with the second interim efficient frontier to create an augmented efficient frontier for use in investment decisioning;

wherein the first multi-objective process and the second multi-objective process are a different process;

wherein the competing objectives are risk and return measures;

and wherein the first multi-objective process is a Pareto Sorting Evolutionary Algorithm (PSEA) process, and the method further including using a dominance filtering process in the generating of the first interim efficient frontiers.